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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------------|------------------|
| 10/812,925  | 03/31/2004  | Tomas Lannestedt     | 1501-1241                  | 5683             |
| 466   | 7590        | 03/28/2006           |                            |                  |
| YOUNG & THOMPSON<br>745 SOUTH 23RD STREET<br>2ND FLOOR<br>ARLINGTON, VA 22202 |             |                      | EXAMINER<br>BAKER, DAVID S |                  |
|   |             |                      | ART UNIT<br>2884           | PAPER NUMBER     |

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/812,925

Applicant(s)

LANNESTEDT, TOMAS

Examiner

David S. Baker

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5, 8 and 10 is/are rejected.
- 7) ☒ Claim(s) 1-4, 6, 7, 9, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/31/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION*****Information Disclosure Statement***

1. The information disclosure statement filed 03/31/2004 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

***Claim Objections***

2. Claims 1, 4, 8, 10, and 12 are objected to because of the following informalities:

Regarding claim 1, line 5 of the claim contains the word “ra-diation” and line 12 contains the word “proc-essing”. The examiner has interpreted the claim to read -- radiation -- and -- processing --, respectively.

Regarding claim 4, line 2 of the claim contains the word “ar-ranged”. The examiner has interpreted the claim to read -- arranged --.

Regarding claim 8, line 2 of the claim contains the word “out-putting”. The examiner has interpreted the claim to read -- outputting --.

Regarding claim 10, line 2 of the claim contains the word “exe-cuted”. The examiner has interpreted the claim to read -- executed --.

Regarding claim 12, line 2 of the claim contains the word “ar-ranged”. The examiner has interpreted the claim to read -- arranged --. Appropriate correction is required.

3. Claims 2, 4, 6, and 7 are objected to because of the following informalities:

Claims 2 and 6 contain the trademark/trade name FireWire. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe the transmission means for the physical layer and the transmission means for the receiving means, respectively, and, accordingly, the identification/description is indefinite. Appropriate correction is required.

4. Claim 7 is objected to under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 7 recites the limitation "said additional data" in line 2. There is insufficient antecedent basis for this limitation in the claim. The term "additional data" does not appear in claims 5 or 6 rendering it indefinite. In the specification of the instant application, the terms "calibration data" and "additional data" are two separate data streams and are not interchangeable. By disclosing in claims 5 or 6 where or how the "additional data" is included in the part of the signal normally reserved for audio data, the antecedent basis rejection may be bypassed.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Piety (US Patent #5,637,871).

Regarding claim 8, Piety discloses a computer program product for use in an IR camera comprising means for outputting a DV signal (video digitizer 206, figure 4) comprising at least one image, said computer program when run in the IR camera causing the IR camera to perform the following steps: retrieving calibration data (the buffered IR images, column 8 lines 58-67, column 9 lines 1-3, 39-63) stored in a memory means (frame buffer memory 208, figure 4) in the IR camera, and including said calibration data (the buffered IR images, column 8 lines 58-67) in the DV output signal (215, figure 4).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (US Patent Application Publication #2001/0046367 A1) in view of Myrick (US Patent #5,045,937).

Regarding claim 5, Shimizu discloses a DV processing unit (image recording apparatus 100, figure 1) comprising: receiving means (IEEE1394 interface 12, figure 1, paragraph 0026) for receiving a DV stream (paragraph 0025-0026), said DV stream comprising at least one image (SD data) and calibration data (the DC component of the signal); sampling means (packet processing units 14-1 to 14-N, figure 1) for forwarding each frame to a DV decoder (decoder 26, figure 1) and to an extraction means (sub frame generation unit 16, figure 1) for extraction of calibration data (the DC component of the signal) from the DV stream; calculating means (writing control unit 25, figure 1) arranged to receive the DV stream from the sampling means (packet processing units 14-1 to 14-N, figure 1) and calibration data (the DC component of the signal) from the extraction means (sub frame generation unit 16, figure 1) and processing the at least one image on the basis of the calibration data (the DC component of the signal); and storage means (frame memory 32, figure 1) for receiving the converted image from the calculating means (writing control unit 25, figure 1) and storing it. Shimizu does not disclose that the image data in the DV stream is IR image data. Myrick discloses a geographical surveying system that uses an IR camera and relays IR image data. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the DV processing unit of Shimizu as the special effects generator (26, figure 1) of

Myrick in order to further improve upon the data overlay output by the special effects generator by allowing more placement options. The special effects generator take video image data and IR image data and overlays them on the same screen (Myrick figure 3). Shimizu's DV processing unit would improve upon this by allowing multiple video overlays to be placed over the IR data simultaneously allowing for more data to be visible at once (Shimizu figure 2).

Regarding claim 10, Shimizu discloses a computer program for use in a DV processing unit (image recording apparatus 100, figure 1), which, when executed in the DV processing unit will cause the following procedure to take place: extraction of calibration data (the DC component of the signal, paragraph 0025-0027) from an incoming DV stream comprising at least one image; processing the at least one image on the basis of the calibration data (the DC component of the signal, paragraph 0028-0030); and storing the converted image (paragraph 0029). Shimizu does not disclose that the image data in the DV stream is IR image data. Myrick discloses a geographical surveying system that uses an IR camera and relays IR image data. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the DV processing unit of Shimizu as the special effects generator (26, figure 1) of Myrick in order to further improve upon the data overlay output by the special effects generator by allowing more placement options. The special effects generator take video image data and IR image data and overlays them on the same screen (Myrick figure 3). Shimizu's DV processing unit would improve upon this

by allowing multiple video overlays to be placed over the IR data simultaneously allowing for more data to be visible at once (Shimizu figure 2).

***Allowable Subject Matter***

10. Claims 1-4 and 12 allowed.
11. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).
12. Claims 6, 7, 9, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
13. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, none of the prior art of record discloses or makes obvious an IR camera; namely, the physical layer means for transmitting a converted signal, characterized in that it comprises additional data means for providing additional data related to the image processing, for inclusion of said additional data in the signal to be transmitted by the physical layer means. References such as Piety (US Patent #5,637,871 A) disclose registration means, conversions means, and DV conversion means. The prior art of reference fails to disclose a physical layer means. The inclusion of a physical layer means as part of the IR camera to transmit output data via means such as DSL, ISDN, or Ethernet is unique to the instant application.



Regarding claim 6, references such as Shimizu (US Patent Application Publication #2001/0046367 A1) disclose receiving means for receiving a DV stream, sampling means for forwarding each frame to a DV decoder, calculating means arranged to receive the DV stream, and storage means for receiving the converted image, but do not disclose that the receiving means is adapted to the FireWire standard using 32kHz 2-channel mode. The prior art of record does not disclose or make obvious the use of this specific FireWire standard. Additionally, the prior art of record is silent as to the audio channels of this FireWire standard transmitting image or calibration data. The use of this type of transmission medium for the receiving unit to be adapted to for the specific transmission of image and calibration data is unique to the instant application.

Regarding claim 9, while references such as Myrick (US Patent #5,045,937) disclose the use of an audio input channel for the transmission of IR additional data or IR calibration data, the prior art of record does not disclose or make obvious using a DV audio output signal normally reserved for audio data for the transmission of IR image data simultaneously with IR calibration data.

Regarding claim 11, references such as Myrick (US Patent #5,045,937) disclose the extraction of IR additional data or IR calibration data from a signal normally reserved for audio information, the prior art of record does not disclose or make obvious the extraction of IR calibration data that is simultaneously transmitted with IR image data from a DV signal normally reserved for audio information.

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14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. US Patent #4,651,002 A – Anno discloses a calibration method for applying a baseline addition or subtraction to IR imagery.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Baker whose telephone number is 571-272-6003. The examiner can normally be reached on MTWRF 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David S Baker  
Examiner  
Art Unit 2878

DSB

  
**DAVID PORTA**  
**SUPERVISORY PATENT EXAMINER**  
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